HALABY FELLOWSHIP

NCAR WEATHER IMPACTS ON AVIATION BOULDER, COLORADO

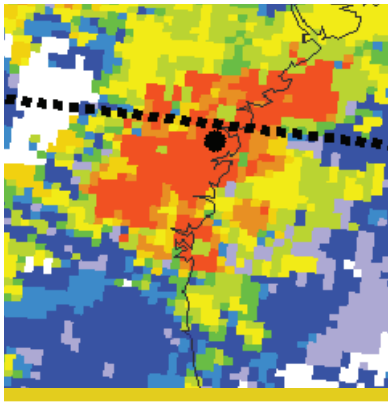
THE PROMISE

This fellowship will help shape the next generation of researchers in aviation weather, honoring Mr. Halaby's vision and his more than five decades of extraordinary contributions.

HALABY
FELLOWSHIP

Every day tens of thousands of aircraft take off and land—weather permitting

Since the first powered flight a century ago at Kitty Hawk, aviation has become essential to the world's economy.



THE CHALLENGE

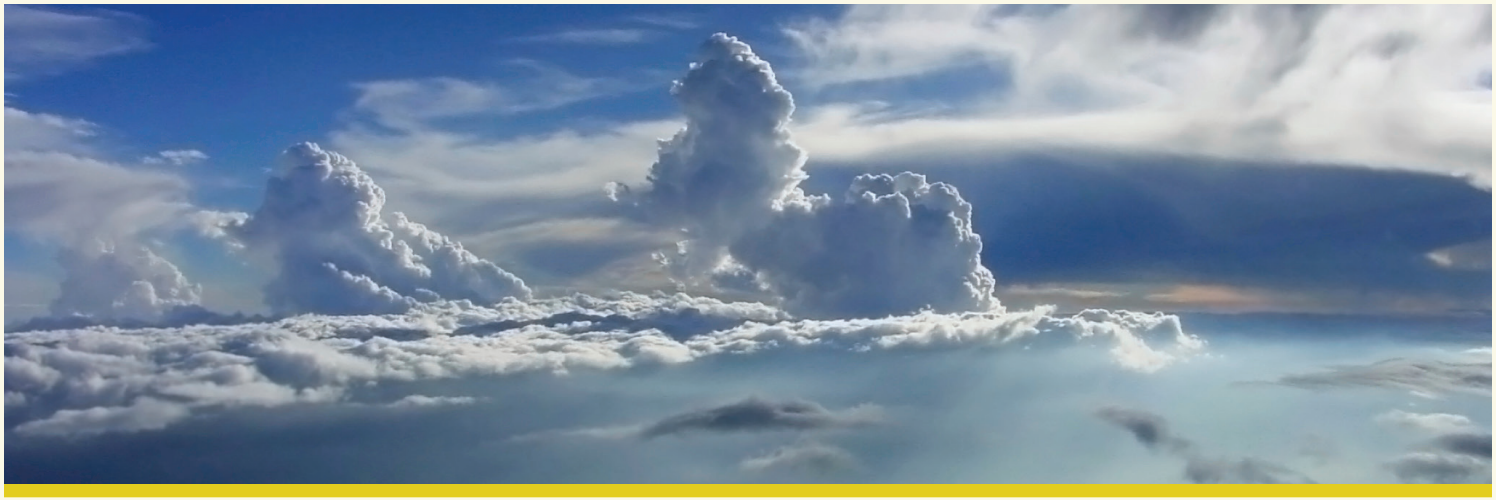
Aviation operations are subject to the varied and often violent events that the Earth's atmosphere can produce—turbulence, wind shear, thunderstorms, icing, and much more.

As Administrator of the Federal Aviation Administration (FAA) from 1961 to 1965, Mr. Halaby's greatest concern was safety. Five decades later many aviation weather safety problems remain to be solved. Unexpected turbulence injures hundreds of passengers and flight attendants each year. Engine icing may result in flameouts that endanger the safety of transoceanic flights. Wintry weather causes dangerous conditions and costly flight delays. Severe thunderstorms produce hazardous winds, hail, and lightning, resulting in frequent delays and damage to aircraft countless times every year.

It is vital to aviation's efficiency and safety to improve the predictions of severe weather affecting aviation and to develop capabilities for better weather hazard avoidance. Today's approaches rely heavily on human cognition and experience, and future capabilities currently being developed to improve air traffic management are not yet effectively including weather as a key factor.

HALABY FELLOWSHIP

A tribute to Halaby's legacy that builds on his contributions to aviation meteorology

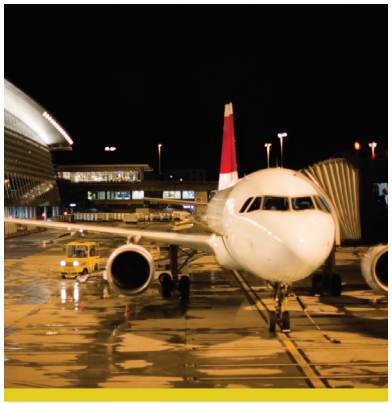


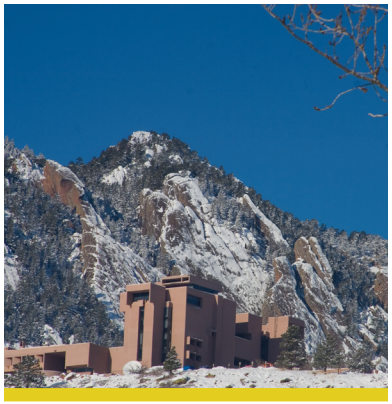
Halaby set altitude records in Navy jets and was the first pilot to fly a jet nonstop across the U.S.

NAJEEB ELIAS HALABY (1915 – 2003)

"Jeeb" Halaby's fascination with flying began in 1927 when he watched a parade in honor of Charles Lindberg. By age 16, he was flying open-cockpit biplanes, and a dozen years later was a U.S. Navy test pilot. Throughout his career, Mr. Halaby served in various federal capacities, including the FAA, where he established stringent safety regulations and modern air traffic control systems. Mr. Halaby made an early connection with the National Center for Atmospheric Research (NCAR) when he became the first chairman of the University Corporation of Atmospheric Research Foundation's Board of Directors.

Mr. Halaby received numerous awards during his lifetime, including Officer of the French Legion of Honor, the Jordanian Medal of Independence, the National Order of the Cedar from Lebanon, and the National Air and Space Museum Trophy for Lifetime Achievement from the United States. He was the recipient of the Donald D. Engen Aero Club Trophy for Aviation Excellence from the Aero Club of Washington. This Fellowship is a fitting tribute to honor Halaby's extraordinary legacy and to build on his significant contributions to aviation meteorology.





NCAR in Boulder, CO

HALABY FELLOWSHIP

NCAR is the nation's leader in addressing aviation weather research

THE FELLOWSHIP

The holder of a Najeeb E. Halaby Graduate Student Fellowship will spend three months (in 2027 or early 2028) in residence with NCAR's Aviation Weather Research Program, which Mr. Halaby was instrumental in establishing in the 1980s. As the nation's leader in addressing aviation weather research, NCAR plays a unique role in meeting user needs by transferring research results to operations through its Research Application Laboratory. **www.ral.ucar.edu**

The Fellow will conduct research broadly aimed at improving the integration of weather into decision support tools for enhanced mitigation of weather sensitivities (e.g., weather impact avoidance) and management of air traffic.

The Fellowship will provide:

- a monthly stipend for three months, including temporary living expenses
- round-trip travel expenses to and from Boulder, CO
- travel to a conference to present results
- page charges for one publication of key results

ELIGIBILITY AND APPLICATION

The Halaby Fellowship targets graduate students (late Masters or early PhD level) enrolled in an aviation-relevant department or program of a domestic or international university. Interested candidates should have advanced research skills, far-reaching vision, and dedication to get things accomplished.

Consideration for this Fellowship will be given to candidates based on the following submitted material:

- Curriculum vitae
- Proposal (maximum five pages) presenting the research to be conducted at NCAR, the anticipated outcome of that, and how the proposed effort ties into the candidate's ongoing graduate research project(s)
- Contact information for three references (one of which should be the student's primary advisor)

NCAR will accept applications for the Halaby Fellowship each year.

Email Applications by February 26, 2027 to halabyfellowship@ucar.edu